

# Memory Plot Page

*Diagnostic application*

Dec 28, 1989

## Introduction

This application page was developed for use with the Graphic Strategies, Inc., color graphics interface board. It plots memory data words in histogram fashion. The data words can be consecutive or separated by any constant spacing. The data that is plotted can be located in any node, as the data request services of the system software are used to collect the data for plotting.

## Display layout

```
0          P MEMORY PLOT          12/22/89 1047
1          AUTO-PLOT   #CY=1
2                               INC=2
3          N=64         MAX=$7FFF
4          C=4          MIN=$8000
5          TXTC=1       *SAVE AUTO
6
```

Interrupt on lines 1–5 to start plotting data. Interrupt under AUTO-PLOT to stop the plot (or exit the page). While plotting is active, AUTO-PLOT is shown in inverse video.

The #CY parameter is the number of *cycles* of the period of the data request and must be in the range 1–250. The INC parameter gives the *incremental* separation for successive data words in bytes. Its value must be even. Use the value 2 to specify contiguous data words. Using a negative value allows plotting data in reverse order.

The N parameter specifies the *number* of data words to plot. They are given equal spacing along the horizontal axis on the plot. The fewer the data words, the wider the slots. The value of N can range from 1–512.

The C parameter is the *color* used for the data plot. The TXTC parameter is the color to use for the *text* that appears on the plot. The color codes are 3-bit values that turn on the Red-Green-Blue color guns. (The value 6 should be yellow, representing red+green. The value 1 is blue.) Text in the upper right of the plot gives the selected plotting parameters and the current data max and min values.

The MAX and MIN values give the scaling (in hexadecimal) for the data values that are plotted. The values shown are appropriate for mapping the entire range of data values onto the 512x512 graphics display. When the value zero lies between MAX and MIN, a blue line is shown on the display to mark its vertical location.